

2023-27 Powerlink Queensland Revenue Proposal Overview

January 2021



Overview of Powerlink's 2023-27 Revenue Proposal

This document provides an overview of Powerlink's Revenue Proposal for the regulatory period from 1 July 2022 to 30 June 2027.

We lodge our Revenue Proposal with the Australian Energy Regulator (AER) every five years as part of our revenue determination process. This process is a once-in-a-five-year opportunity to build more trust with our customers, stakeholders and the AER. It is important as it sets about 80% of our annual revenue. This revenue funds the capital and operating expenditure we need to build, operate and maintain the prescribed (regulated) transmission network and is paid for by electricity customers across Queensland.

We have undertaken extensive engagement with our customers, stakeholders, the AER and the AER's Consumer Challenge Panel (CCP23) on all key elements of our Revenue Proposal. This built on the strong foundations we undertake in the normal course of business to achieve our overarching goal to deliver a Revenue Proposal that is capable of acceptance by our customers, the AER and ourselves at the time we lodged in January 2021.

The input we received from our engagement has directly shaped many of the positions put forward in our Revenue Proposal. In particular, our decision to propose a 3% reduction in our capital expenditure and a target of no real growth in operating expenditure. These building-blocks, in addition to a significant reduction in our rate of return, has resulted in a forecast 15% decline in our Maximum Allowed Revenue (MAR).

Our prudent and efficient asset management approach has also led to a forecast decline in our Regulatory Asset Base (RAB) in both nominal and real terms over the 2023-27 regulatory period¹.

Under our Revenue Proposal customers can expect to see a drop of 11% in average transmission prices in the first year of the next regulatory period (2022/23), and for price growth over the remainder of the regulatory period to be in line with inflation. For average residential and small business customers, this represents an estimated saving in the first year of \$13 and \$23, respectively. This is on the basis of assumed tariffs and consumption².

This overview document provides a summary of the key elements of our Revenue Proposal, which includes:

- forecast revenue and price impacts;
- forecast capital expenditure;
- forecast operating expenditure;
- our Regulatory Asset Base;
- network performance;
- our engagement approach; and
- key risks and benefits.

All customers and stakeholders will have the opportunity to provide a submission to the AER on our Revenue Proposal after it is lodged. We also encourage customers and other stakeholders to contact us with any questions and to provide input and feedback directly.

To view our complete Revenue Proposal, please visit our website at www.powerlink.com.au/2023-27-regulatory-period.

¹ Based on a comparison of 1 July 2022 opening RAB to 30 June 2027 closing RAB.

² The transmission component of electricity bills is based on information from the Australian Energy Market Commission (AEMC) Electricity Price Trends Report, December 2020. Assumed residential consumption is based on the Queensland Competition Authority's (QCA) annual Tariff 11 (residential) median energy usage of 4,061kWh p.a. Assumed small business consumption is based on the QCA's annual Tariff 20 (small business) median energy usage of 6,831kWh p.a.

About Powerlink

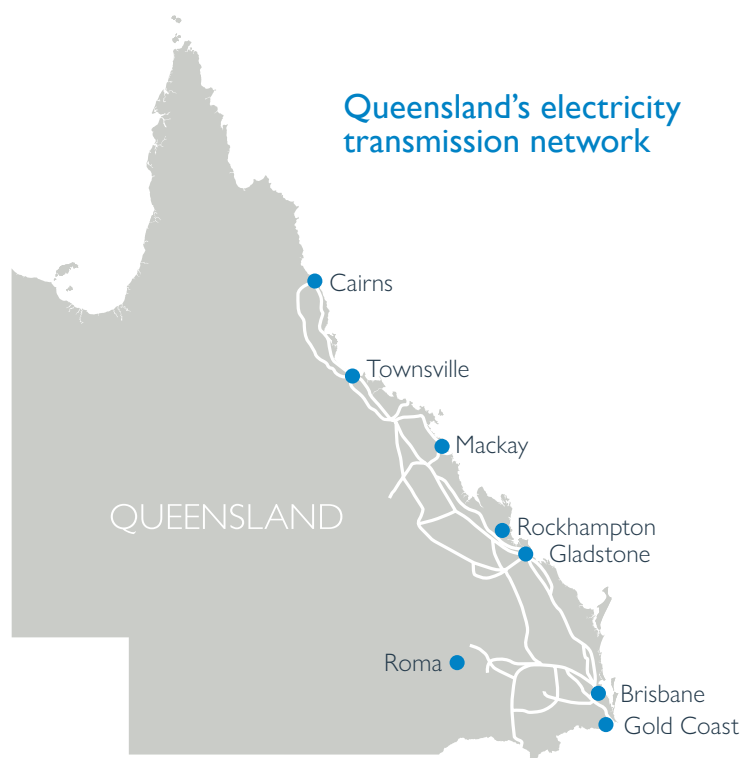
Powerlink Queensland is a Government Owned Corporation that owns, develops, operates and maintains the electricity transmission network in Queensland. Our transmission network runs approximately 1,700km from north of Cairns to the New South Wales (NSW) border.






We have an important responsibility to deliver safe, secure, reliable and cost-effective electricity transmission services to our directly-connected customers and almost five million Queenslanders.

Our role in the electricity supply chain is to transport high voltage electricity, generated at power stations, through the transmission grid to the distribution networks owned by Energex and Ergon Energy (part of the Energy Queensland Group) and Essential Energy (in northern NSW) to supply customers.

We also transport electricity to industrial customers such as rail companies, mines and mineral processing facilities, and to NSW via the Queensland/NSW Interconnector (QNI) transmission line.

For a typical Queensland residential electricity consumer, the cost of Powerlink's high voltage electricity grid represents around 9% of the total delivered cost of electricity.



9%	Electricity supply chain components		Proportion of electricity bill
	<p>The cost of Powerlink's high voltage electricity grid represents around 9%* of the total delivered cost of electricity for the typical Queensland residential electricity customer.</p>		Generation
		Transmission	9%
		Distribution	40%
		Retail and other [^]	10%
		Environmental policies	12%

*2020 Residential Electricity Price Trends Report – SEQLD supply chain components 2021/22.

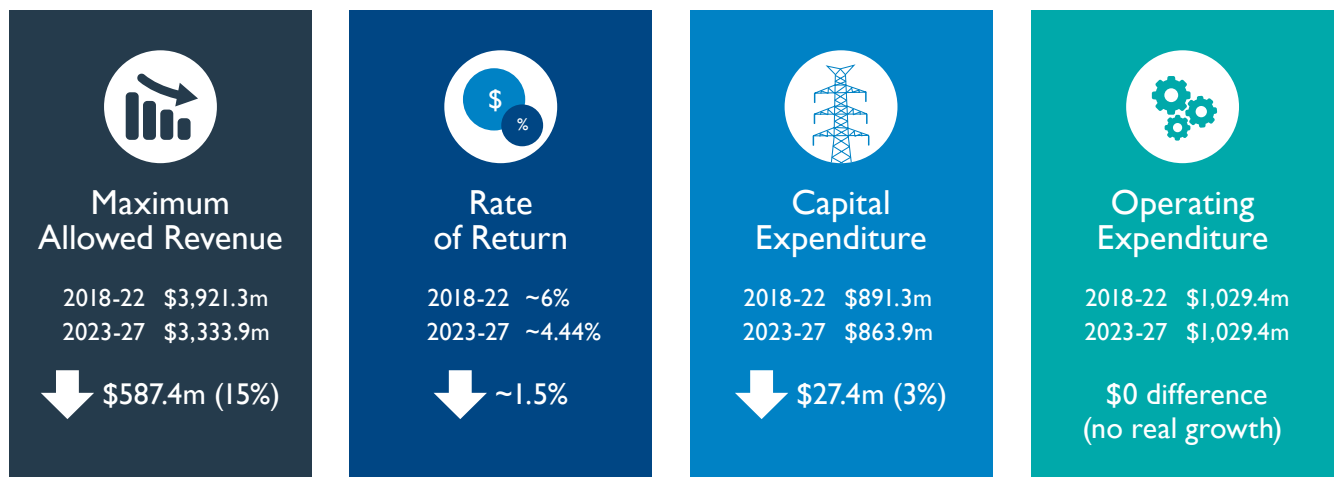
[^]Includes costs associated with retail, metering, losses and errors in the estimated value of all other supply chain cost components. The AEMC 2020 Residential Price Trends Report refers to this overall component as residual.

Revenue Proposal Snapshot

The business and operating environment for Powerlink, and for many of our customers, is one of change and uncertainty. Affordability, the impact of COVID-19 on the economy and the challenges presented by an energy system in transition are all key factors that have shaped our Revenue Proposal.

Our Revenue Proposal demonstrates our commitment to being customer-focused, and to continuing to provide safe, secure, reliable and cost-effective transmission services to our directly-connected customers and almost five million Queenslanders.

Key highlights of our 2023-27 Revenue Proposal, compared to the current 2018-22 regulatory period, are shown below.



Notes:

- All figures are in \$m real, 2021/22 and are for the full five-year regulatory period.
- MAR is compared to the AER allowance for the 2018-22 regulatory period.
- Rate of return is nominal vanilla.
- Capital and operating expenditure are compared to the actuals/forecast for the 2018-22 regulatory period.
- Capital expenditure figures are net of disposals.
- Operating expenditure figures reflect underlying operating expenditure, which excludes movements in provisions, Network Capability Incentive Parameter Action Plan (NCIPAP) project costs, debt raising and network support costs.

Electricity prices

11% nominal reduction in the transmission component of electricity prices in the first year of the 2023-27 regulatory period:

- \$13 reduction for residential customers.
- \$23 reduction for small business customers.



Prices and Revenue

Prices

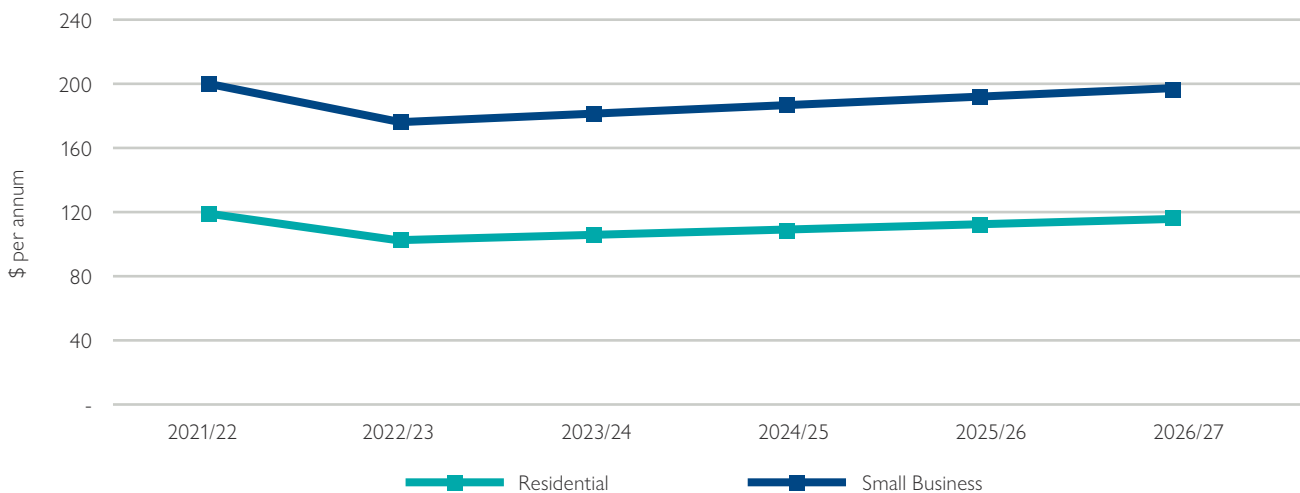
Based on our Revenue Proposal forecast, the indicative impact to the transmission component of electricity prices in the first year of the next regulatory period (2022/23) would be:

- **Residential: a nominal reduction of \$13 (11%).**
- **Small business: a nominal reduction of \$23 (11%).**

On average, transmission price increases for average residential households and small businesses will remain in line with inflation (assumed forecast of 2.25%) for the remainder of the regulatory period (refer to figure below).

We recognise a significant driver of this reduction is the current low rate of return environment, which is largely driven by financial markets. However, we are also doing our part to respond to customer affordability concerns by continuing to drive prudent and efficient expenditure. This is demonstrated through our proposed 3% real reduction in capital expenditure and target of no real growth in operating expenditure.

Transmission component of electricity prices (\$ nominal)

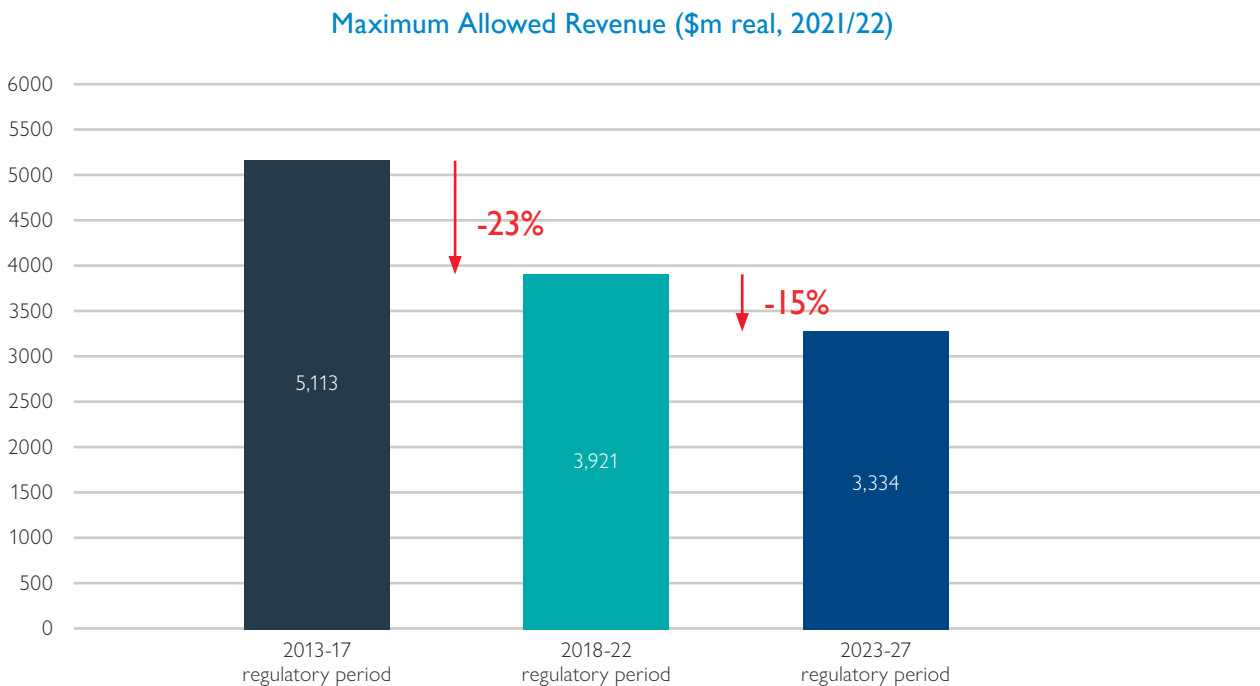


Prices and Revenue

Revenue

Our Revenue Proposal forecasts Maximum Allowable Revenue (MAR) of \$3,333.9 million for the 2023-27 regulatory period.

This is \$587.4 million or 15% lower than the AER's allowance for the current regulatory period. The key driver for this reduction is a lower rate of return.



Rate of Return

The rate of return is a key building-block in determining our MAR.

We have applied the AER's 2018 Rate of Return Instrument to calculate our rate of return. This results in an estimated post-tax nominal rate of return of 4.44% in the first year of the 2023-27 regulatory period. This is a substantial reduction from our current rate of return of approximately 6%.

The main driver of our lower rate of return is the historically low risk free (Government bond) rate environment.

Forecast Capital Expenditure

Our total forecast capital expenditure for the 2023-27 regulatory period is \$863.9 million. The majority of this (\$726.1 million or 84%) is non-load driven network expenditure.

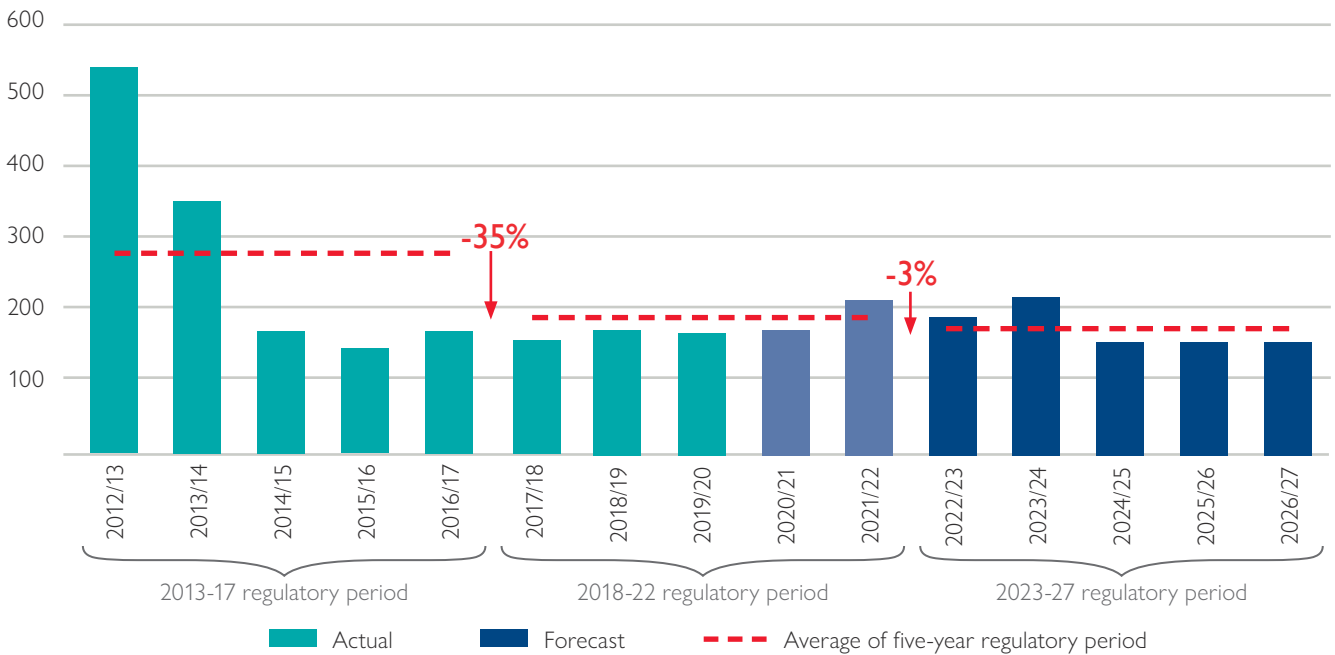
This represents a 3% real reduction on actual/forecast capital expenditure in the 2018-22 regulatory period (refer to figure below).

This is a significant shift from what we forecast in our draft Revenue Proposal in September 2020. At that time, we forecast a 12% increase in capital expenditure. Customers provided feedback that this increase was a serious concern for them.

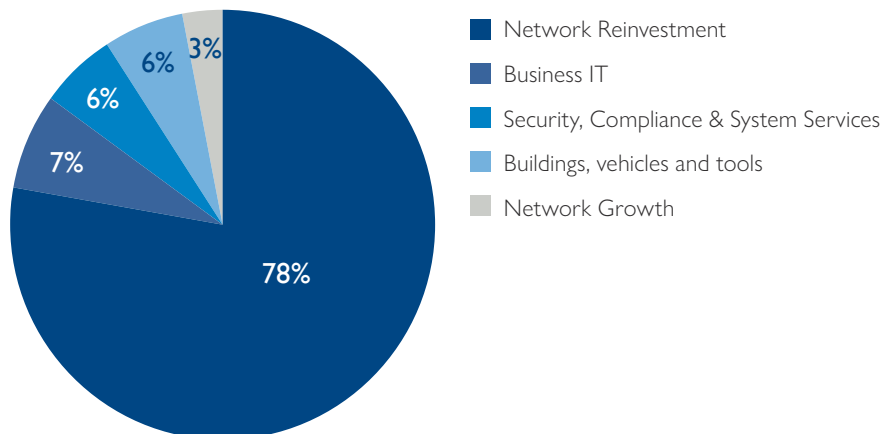
As we further developed and finalised our Revenue Proposal, we continued to focus on how we could be more prudent and efficient in the management of our network needs while ensuring that we would continue to deliver safe, secure, reliable and cost-effective transmission services.

As a result, consistent with our commitment to affordability and in response to customer feedback, we have reduced our total forecast capital expenditure.

Total capital expenditure (\$m real, 2021/22)



This pie chart shows a breakdown of our forecast capital expenditure for the 2023-27 regulatory period. The majority (78%) of our total forecast capital expenditure is reinvestment in existing network assets. This type of investment is primarily due to end of asset life, obsolescence and reliability or safety requirements.



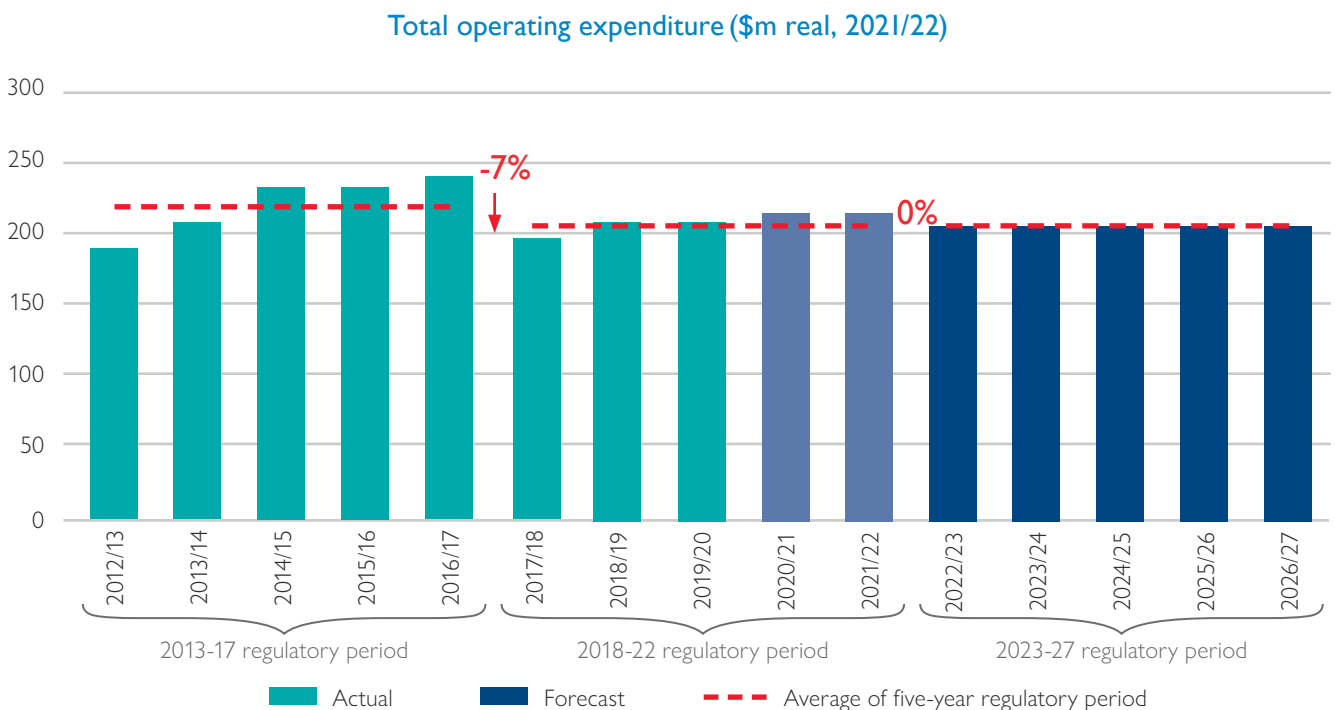
Forecast Operating Expenditure

We have heard customer feedback on productivity, affordability and the impacts of the current economic climate. Based on this feedback and our goal to have a Revenue Proposal that is capable of acceptance by our customers, the AER and Powerlink, we have committed to pursuing a target of no real growth in operating expenditure compared to actual/forecast operating expenditure in the current regulatory period (refer to figure below).

Based on this target, our total operating expenditure forecast for the 2023-27 regulatory period is \$1,029.4 million³.

To achieve this target we have proposed, in combination, a higher than industry average productivity factor of 0.5% per annum and have not pursued any step changes.

The adoption of this approach represented a significant shift for our business during the development of our Revenue Proposal and it will be a challenge for us to meet this stretch target. However, on balance, we considered that we should rise to this challenge in the interests of customers and continue to drive our business hard to find further efficiencies and productivity improvements to become a world-class transmission network service provider.



³ Reflects underlying operating expenditure, which excludes movements in provisions, Network Capability Incentive Parameter Action Plan (NCIPAP) project costs which are part of the Service Target Performance Incentive Scheme (STPIS), debt raising and network support costs. These adjustments were discussed with the AER and customers prior to lodgement of our Revenue Proposal.

Regulatory Asset Base

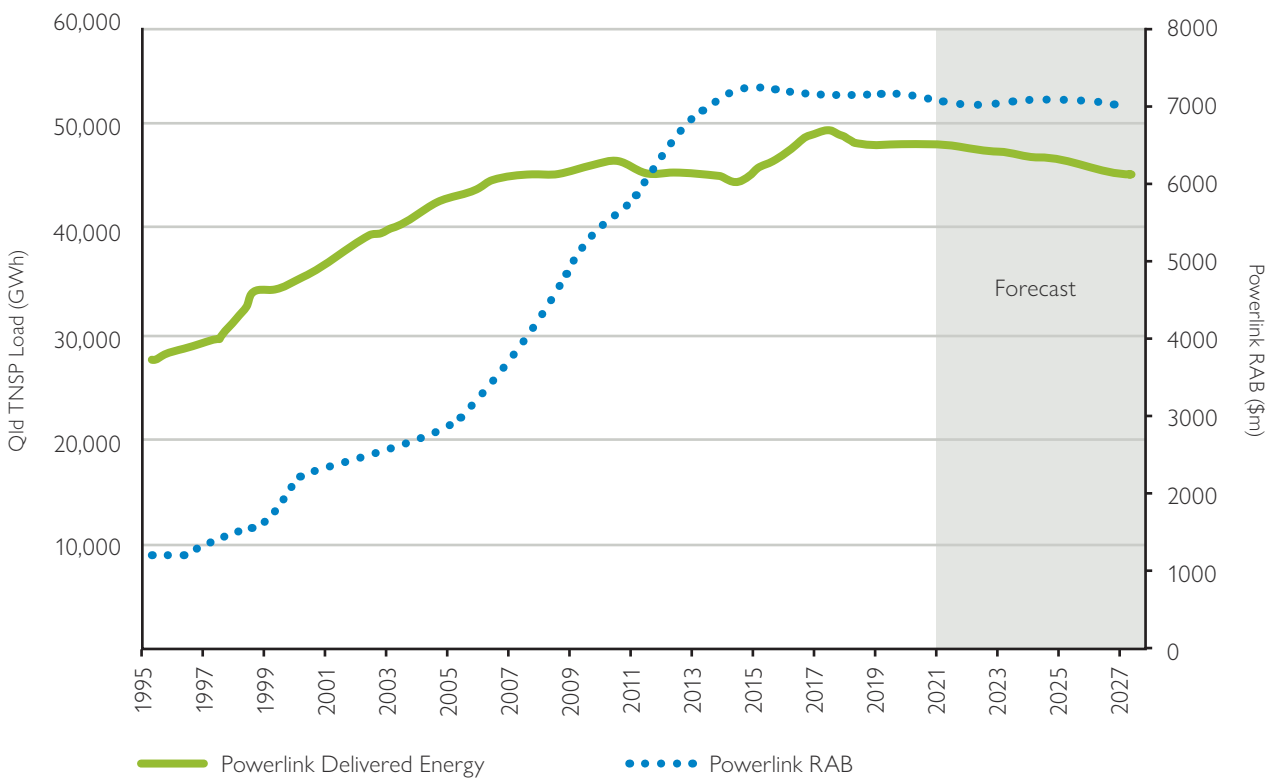
The Regulatory Asset Base (RAB) is the value of the assets used by Powerlink to provide prescribed (regulated) transmission services.

Our prudent and efficient asset management approach has also led to a forecast decline in our RAB in both nominal and real terms over the 2018-22 and 2023-27 regulatory periods⁴:

- **2018-22 RAB is forecast to decrease by \$111.0m (nominal) and \$621.9m (real 2021/22).**
- **2023-27 RAB is forecast to decrease by \$19.4m (nominal) and \$749.6m (real 2021/22).**

The decline in our RAB also aligns with our flat or declining forecasts of delivered energy (refer to figure below). From a reinvestment perspective, the decline in our RAB also demonstrates that where reinvestment is required to address a network need we consider a range of options and do not necessarily replace like-for-like.

Powerlink forecast delivered energy (GWh) versus RAB (\$ nominal)



⁴Based on a comparison of 1 July 2017 opening RAB to 30 June 2022 closing RAB for the 2018-22 regulatory period and 1 July 2022 opening RAB to 30 June 2027 closing RAB for the 2023-27 regulatory period.



Network Performance

Part of our revenue allowances for the 2023-27 regulatory period will be linked to how well we perform under the AER's Service Target Performance Incentive Scheme (STPIS) within period.

The STPIS is designed to provide performance incentives for electricity transmission network service providers to improve or maintain a high level of service for the benefit of National Electricity Market (NEM) participants and end users of electricity.

We commenced our participation in the scheme in 2007. Since then, we have performed strongly under the STPIS by closely managing performance of our network in terms of reliability and availability, while minimising the impact of transmission congestion. This ultimately benefits customers by way of improved, or maintained, high levels of network reliability, availability and capability.

There have been significant changes in our operating environment as Australia's energy market transitions to a low carbon future. This presents challenges in the management of our network performance, such as changes in power flows and the emergence of system strength constraints, and may impact our ability to meet STPIS targets during the 2023-27 regulatory period.

We will continue to respond to these challenges to ensure that the needs of our customers are met and that we continue to meet our network security and reliability obligations.

We remain firmly of the view that the STPIS should be reviewed in light of the significant and rapid changes in the energy market to ensure it remains fit-for-purpose and continues to promote the long-term interests of consumers.

Engagement

We are committed to genuine and timely engagement to inform our decision-making as part of our normal business operations. It is fundamental to the way we do business and has led to better outcomes for our customers and stakeholders.

Powerlink is the first network business to co-design our Revenue Proposal engagement approach with customers and stakeholders. This has enabled customers to directly shape the scope, sequencing, techniques and evaluation of our engagement.

Goal

Our engagement approach for the Revenue Proposal is driven by our overarching goal:

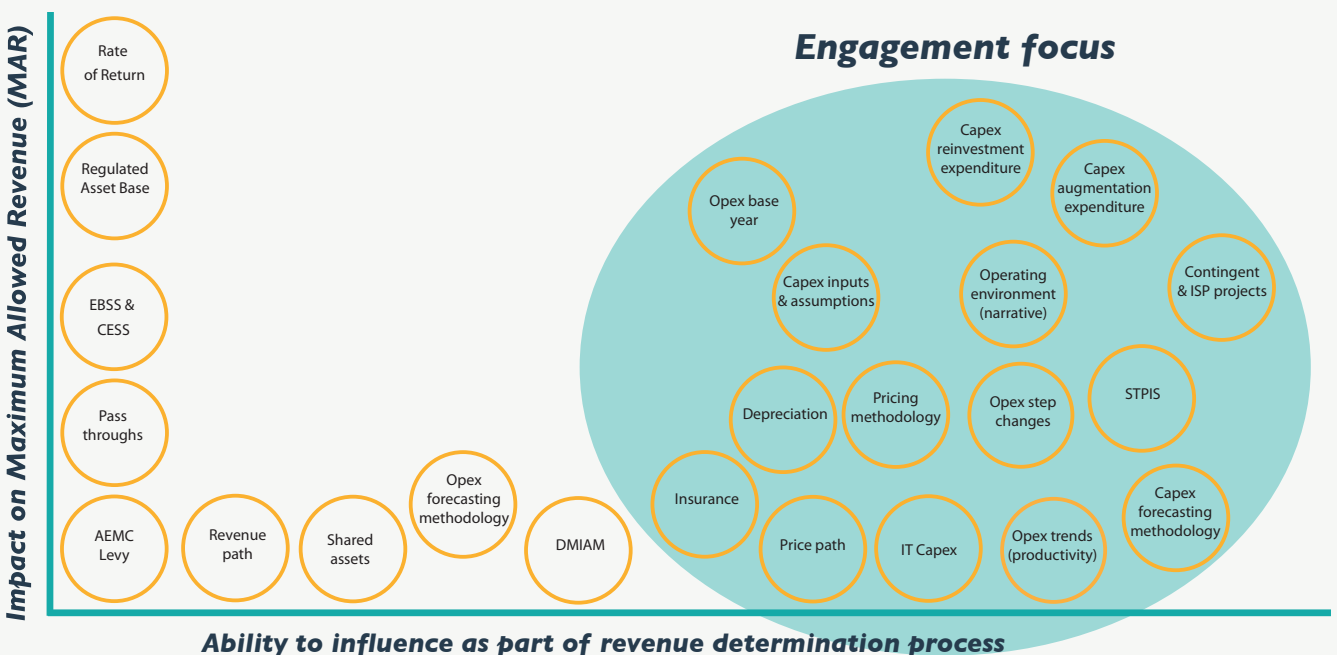
To deliver a Revenue Proposal that is capable of acceptance by our customers, the AER and Powerlink.

Scope

Our engagement is built on four foundational elements. These reflect feedback received from customers and stakeholders about what comprises successful engagement on a Revenue Proposal.

Our scope of engagement for the development of our Revenue Proposal was a key part of the co-design process. It was established by plotting elements that customers and stakeholders considered had the largest impact on revenue against the ability for each element to be influenced by engagement. This enabled more efficient and focused engagement.

Our Engagement Plan also proposed the level of engagement on the International Association of Public Participation (IAP2) Spectrum we intended to apply, by topic/issue.



Engagement

Activities

We leveraged our Revenue Proposal engagement off business-as-usual activities, which included working closely with our existing Customer Panel. Established in May 2015, our Customer Panel has played a primary role in influencing our decision-making since its inception.

To enable more regular and deeper engagement, we established a Revenue Proposal Reference Group (RPRG) which involved five members of the existing Customer Panel.

Since its establishment in October 2019, the RPRG has considered and provided detailed input on key aspects of our Revenue Proposal on an almost monthly basis and has met 10 times in total.

The AER and AER's Consumer Challenge Panel (CCP23) also participated in engagement activities as appropriate, including Customer Panel and RPRG meetings.

Draft Revenue Proposal

The development and publication of a draft Revenue Proposal was a key engagement activity. A draft Revenue Proposal is not a formal Rules requirement and we originally did not plan to release one. However, based on constructive engagement with our customers and the AER during 2020, we decided to prepare and publish a draft version of our Revenue Proposal for input in September 2020. We considered that this would further promote the transparency of our engagement and would enable our stakeholders to see in 'black and white' where our business was heading, why, and how we had responded to issues raised to date.

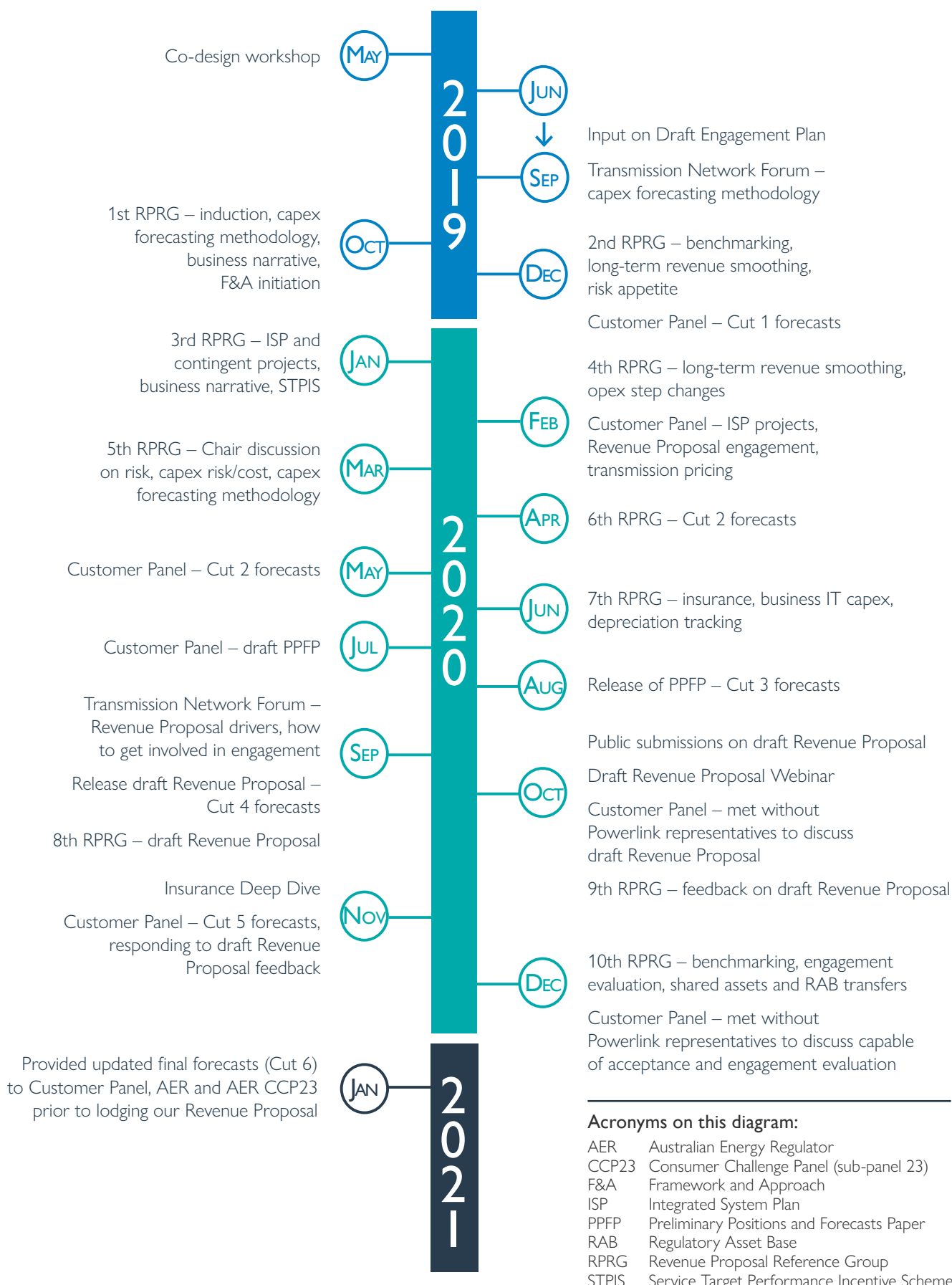
While we have actively encouraged input and participation from customers, the AER and the AER's CCP23 every step of the way, the draft Revenue Proposal provided another, perhaps more formal opportunity for stakeholders to provide feedback.

In hindsight, we consider that this was an important step (albeit unplanned and challenging to deliver at the time), which demonstrated that we were serious about developing a Revenue Proposal that was capable of acceptance by customers, the AER and Powerlink at the time we lodged our Revenue Proposal in January 2021. It also reinforced our commitment to take a 'no surprises' approach to our engagement.



Engagement

Our key engagement activities to date are shown on the following timeline.



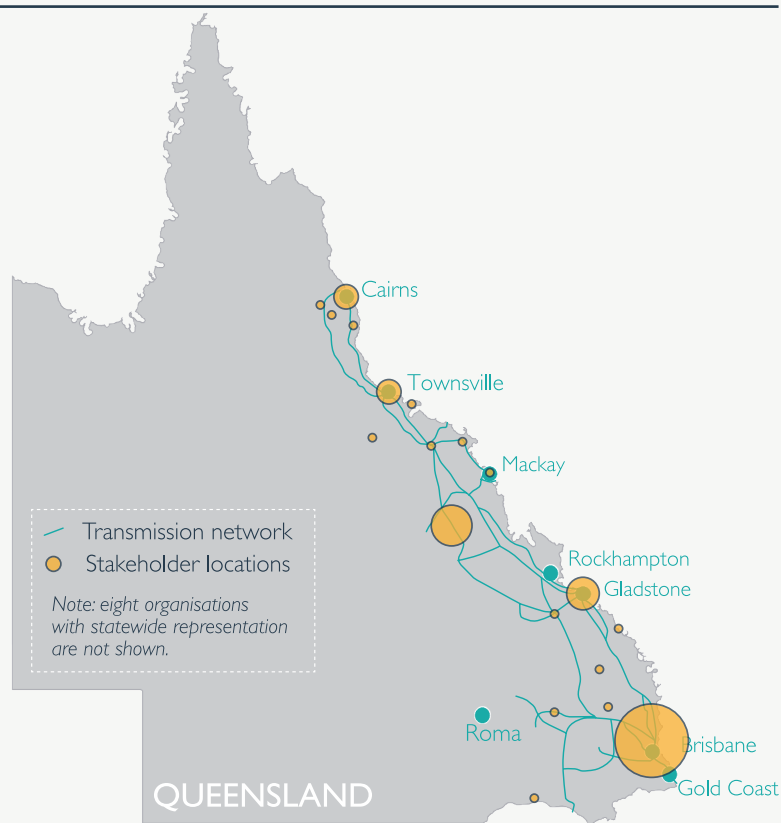
Acronyms on this diagram:

AER	Australian Energy Regulator
CCP23	Consumer Challenge Panel (sub-panel 23)
F&A	Framework and Approach
ISP	Integrated System Plan
PFPF	Preliminary Positions and Forecasts Paper
RAB	Regulatory Asset Base
RPRG	Revenue Proposal Reference Group
STPIS	Service Target Performance Incentive Scheme

Engagement

To complement the depth of our engagement, Powerlink also engaged broadly with a wide range of customers and stakeholders, including across regional Queensland.

The following map outlines the location or geographic areas represented by customers and stakeholders across Queensland that we engaged with in the development of our Revenue Proposal. As a guide, the larger the circle, the greater the number of stakeholders that were involved in engagement from that area.



How feedback influenced our decision-making

We genuinely considered all input and feedback from our customers and stakeholders.

The following table shows some of the key issues discussed, feedback received and how it influenced our Revenue Proposal. A more detailed table is included in Chapter 3 of our Revenue Proposal.

Topic	Feedback received	How Powerlink used the feedback in the revised revenue proposal
Affordability and our overall capital expenditure forecast	In response to our draft Revenue Proposal, customers were concerned about the proposed 12% increase in capital expenditure from the current regulatory period and its impact to customer affordability.	Since our draft Revenue Proposal, we have continued to focus on how we can more prudently and efficiently manage the network while continuing to deliver safe, secure, reliable and cost-effective electricity transmission services. We have reduced our total forecast capital expenditure and proposed a 3% real reduction in capital expenditure from the current regulatory period.
Affordability and our overall operating expenditure forecast	Customers stated that affordability was a key issue and encouraged us to take proactive steps in our operating expenditure forecast to address affordability.	We have heard customer feedback on business productivity, affordability and the impacts of the current economic climate. Based on this feedback we have committed to pursue a target of no real growth in operating expenditure. We have set a 0.5% per annum productivity target, which is above the industry average (0.3%), and proposed no step changes. The combination of real productivity growth above the industry average and no proposed step changes reflects our commitment to customers to target no real growth in operating expenditure.

Engagement

Topic	Feedback received	How Powerlink used the feedback in the revised revenue proposal
Draft Revenue Proposal	Customers strongly encouraged us to publish a draft Revenue Proposal by September 2020.	We published a draft of our Revenue Proposal in September 2020. This was not in our original plans given we had planned to release at least three sets of forecasts publically as our Revenue Proposal was being developed.
Capital expenditure contingent reinvestment projects	<p>There was initial support from customers for the concept of contingent reinvestment projects for those investments that may have significant uncertainty around need, timing and cost.</p> <p>While the RPRG and the AER's CCP23 were supportive of the concept as a way to balance risks between consumers and Powerlink, their feedback on our draft Revenue Proposal was to not support using the existing contingent project framework.</p> <p>The AER raised concerns with regards to asset condition triggers and the potential for contingent reinvestments to move away from an incentive-based to more of a cost of service regulatory approach.</p>	<p>We decided not to pursue contingent reinvestment projects in our Revenue Proposal.</p> <p>We still consider that this concept has merit and may pursue outside the Revenue Proposal process.</p>
Proposed depreciation tracking approach change	<p>Customers acknowledged our proposed change to a year-by-year depreciation tracking approach is more accurate over time.</p> <p>We were asked to investigate whether the transitional impacts of this change in approach (i.e. higher revenue) could be mitigated/ smoothed.</p>	<p>We investigated options to smooth the transitional impact and have proposed to manage this by a minor change to asset lives for existing secondary systems assets.</p> <p>This smooths the revenue impact on customers between the 2023-27 and 2028-32 regulatory periods.</p>
Business Narrative	<p>Customers suggested we develop a Business Narrative document.</p> <p>They also provided further feedback that the first draft of our Business Narrative did not reference impacts of climate change, needed to clarify the target audience for the narrative, explain how factors will impact the Revenue Proposal and customers, and focus the customer section on more than just affordability.</p>	<p>Several versions of our Business Narrative were circulated to the RPRG and Customer Panel with feedback incorporated into the updated Business Narrative (e.g. more explicit discussion of risks, the environment and defining the document's intended target audience).</p>

Key Risks and Benefits

We have identified several key risks and benefits associated with our Revenue Proposal forecasts. This is not intended to be a comprehensive list.

Risk	Description
COVID-19 impacts	If COVID-19 persists or worsens, this may impact our ongoing capital and operating expenditure delivery.
Capital expenditure cost and delivery pressures	The electricity transmission interconnector investments identified in AEMO's 2020 Integrated System Plan (ISP) and investment in renewable generation throughout the NEM may lead to additional competition for scarce skilled labour. This may place upward pressure on the cost of delivering our capital works, which could impact our ability to deliver a 3% real reduction in capital expenditure.
Operating expenditure cost pressures	Potential operating expenditure cost increases (e.g. insurance, cyber security and others) may impact our ability to meet our target of no real growth in operating expenditure. Our proposed operating expenditure represents a floor and will be a challenge to meet.
External environment uncertainty	Significant change in energy markets and the current and medium-term economic uncertainty, means it is more difficult to forecast demand and energy, capital and operating expenditure, and future requirements of the network to meet customer needs.
Service Target Performance Incentive Scheme (STPIS)	Changes in power flows and the emergence of system strength constraints may impact our ability to meet STPIS targets.

Benefits	Description
Reduction in electricity prices	Proposed expenditure and revenue forecasts will reduce Queensland electricity prices.
Engagement approach	Our engagement approach has enabled our customers to influence decisions that directly impact on them. We have built better relationships and trust with them as a result.
Operating a safe, secure, reliable and cost-effective network	Proposed expenditure forecasts will see Powerlink continue to operate its network in a prudent and efficient manner and deliver safe, secure, reliable and cost-effective transmission services.
Delivering business efficiency	Our target of no real growth in operating expenditure is underpinned by an above benchmark industry productivity target and no step changes. This will mean we will continue to drive our business hard to find further efficiencies and productivity improvements.
Reduction in RAB	Our RAB is forecast to reduce in both real and nominal terms over the 2023-27 regulatory period ⁵ . This reflects our prudent asset management approach to capital reinvestment in the current low demand growth environment and contributes to lower prices for customers.
Depreciation tracking approach	Our proposed change to year-by-year depreciation tracking will ensure the recovery profile of our costs better reflects the economic lives of our assets and our proposed transitional adjustment will smooth the revenue impact of this change on customers.

⁵ Based on a comparison of 1 July 2022 opening RAB to 30 June 2027 closing RAB.

Next Steps

The next steps in our revenue determination process are:

Date	Action
January 2021	Powerlink lodges its Revenue Proposal with the AER.
February-August 2021*	AER reviews Powerlink's Revenue Proposal, invites public submissions and will hold its Public Forum.
September 2021*	AER releases its Draft Decision.
December 2021*	Powerlink lodges its Revised Revenue Proposal with the AER.
April 2022	AER releases its Final Decision.
1 July 2022	Start of new regulatory period.

* Indicative dates.

Further information

Our Revenue Proposal is available on our [website](#).
Further detail is also available on the AER's [website](#).

Contact us

You can contact us in the following ways:

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